

GS Mill Hard End Mills

GS Mill Hard

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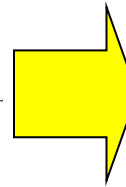
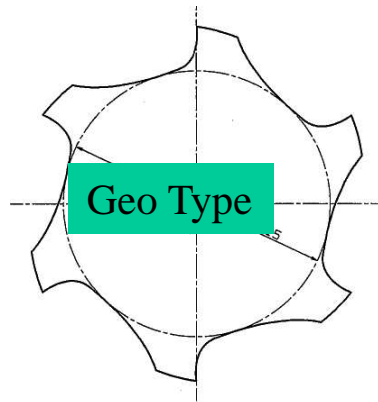
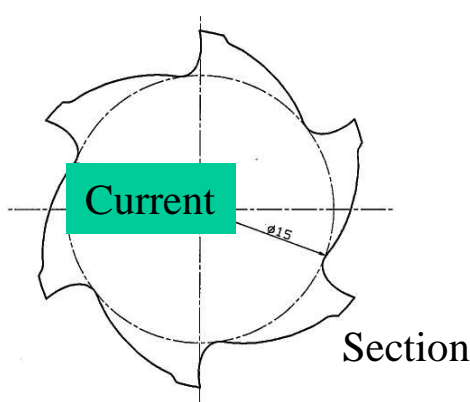
Milling Up to 70HRc

- **Features:**
- High Speed Machining of Hardened Steels
- For Machining Hardened Steels up to 70 Hrc
- Nachi's New "GS Hard Coat" (Al-Ti-Cr Based Coating)
- 3 Times Tougher Anti-Oxidization at 1,100° C

- **Work Materials:**
- Pre-Hardened Steels, Mold Steels, Hardened Steels H13, D2, M3 (45-60 Hrc)

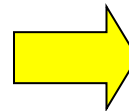
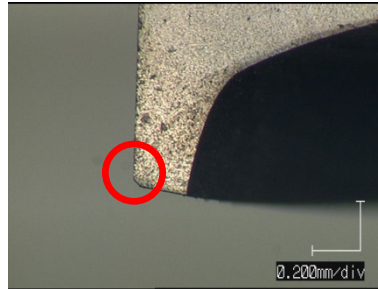
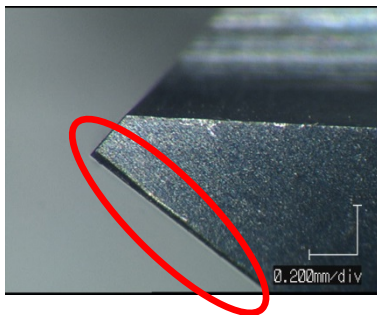
Features of GS-Mill Hard

- “Geo” Flute Geometry to Increase Both Chip Evacuation and Higher Rigidity
- Corner Chamfering to Minimize the Corner Wear
- New “GS Hard” Coating to Dissipate Heat and Smoother Chip Evacuation
- Ultra Micro Grain Carbide for Better Abrasion Resistance



**Smooth Curvature Enables
Better Chip Evacuation
Wider Land Width Increases
Tool Rigidity**

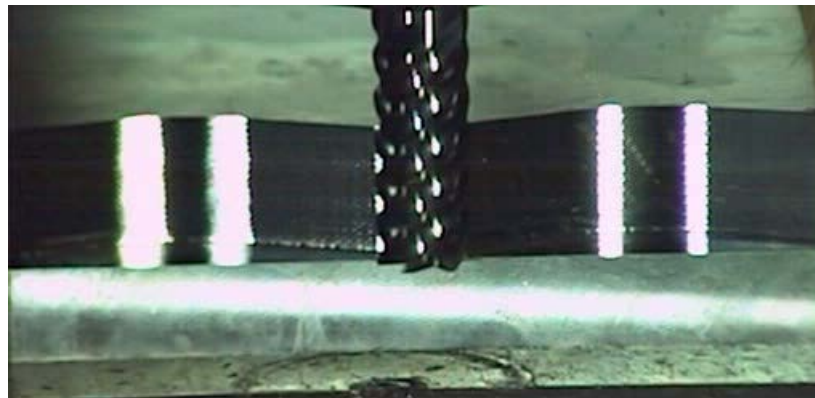
【Invention on Corner Edge】



**The Corner Chamfering Minimizes
the Corner Wear Effectively**

Movie**SKD61(53HRC) Ultra High Speed**

Dia: ϕ 10 6Flute Dry
V: 800m/min
F: 10, 000mm/min
aa: 10mm
ar: 0. 2mm
Material: SKD61(53HRC)



GS Mill Hard Ball



Durable Tool Life

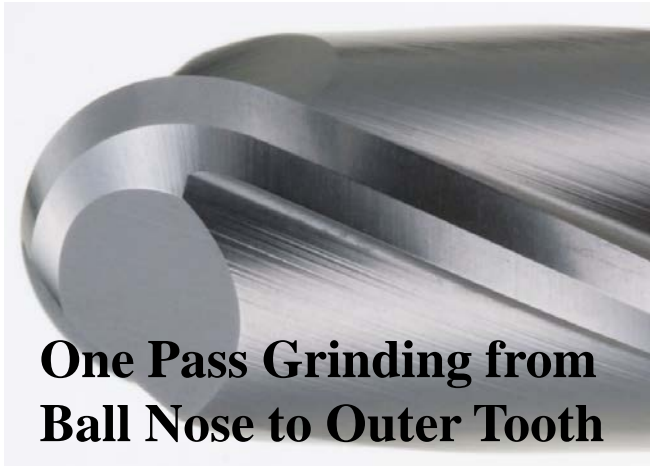
- Newly Developed “GS Hard Coating” with High Resistance to Wear and Lubrication Reduces Friction
- High TRS by Ultra-Micro Grain Carbide Protects Chipping as Well as Wear
- Excellent Work Surface

Accurate Surface

- The Ball Nose Accuracy is Applied by $+3 \sim -7 \mu\text{m}$
- The “One-Pass” Grinding Guarantees Excellent Surface Even on the Perpendicular Wall

Work Materials:

Pre-Hardened Steels, Mold Steels, Hardened Steels H13, D2, M3 (45-60 Hrc)



One Pass Grinding from Ball Nose to Outer Tooth

**High Performance Milling SFM=750 RPM=9500 Feed= 80 ipm
(End Mill R4, Mold Steel, 53HRC, R4, Radial Depth= 4mm, axial
Depth=.025))**



Thank You